REMARKS

In the Official Action, the Examiner raised a rejection of claims 4 and 7 under the second paragraph of 35 U.S.C. §112 with respect to the recitation of "(meth)acrylic acid amide". In addition, the Examiner rejected claim 4 under 35 U.S.C. §102(b) as allegedly being anticipated by Miller et al., U.S. Patent No. 3,048,501, or Giddings et al., U.S. Patent No. 4,770,795. The Examiner also rejected claims 4-5 under 35 U.S.C. §102(b) as allegedly being anticipated by JP 10-130338. The Examiner further rejected claims 1, 3 and 6-7 under 35 U.S.C. §102(b) as allegedly being anticipated or in the alternative under 35 U.S.C. §103(a) as allegedly being obvious over aforementioned Miller et al. or the '338 Japanese Publication.

In response to the points raised in the Official Action, applicants initially note that the term "(meth)acrylic acid amide" is synonymous with "(meth)acrylamide". This understanding can be obtained from various technical publications such as the attached excerpt from ChemIndustry.com which indicates that the compound "methacrylic acid amide" is synonymous with "methacrylamide". Thus, since those of ordinary skill in the art will understand the term "(meth)acrylic acid amide", applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112. Turning to the rejection on prior art grounds, claim 1 has been amended to further recite that the (meth)acrylic copolymer resin (A) has a weight-average molecular weight (Mw) of 20,000 or more, and is produced by radical polymerizing (a-1) 4 to 50 wt% of (meth)acrylic acid, (a-2) 0.5 to 17 wt% of (meth)acrylic acid amide, and (b) 35 to 95.5 wt% of compound having a reactive unsaturated bond other than (a-1) and (a-2). Claim 1 has further been amended to recite that the (meth)acrylic copolymer resin (A) is dissolved in an organic solvent (B). Support for the amendments to claim

1 exists in the specification, such as in the passage beginning at page 7, original claim 4, and the passage beginning on page 10 which describes organic solvent (B). The present Amendment further amends claim 5 to place the claim into independent form so that it recites a coating solution comprising the (meth)acrylic copolymer resin (A) defined in the same manner as amended claim 1, and further reciting that the resin (A) is dissolved in an organic solvent (B). Claims 4 and 7 have been canceled without prejudice or disclaimer. Finally, new dependent claims 8-11 have been added consistent with the teachings of the specification set forth on pages 9 and 10.

In view of the amendments to the claims and the cancellation of claims 4 and 7, the rejections of these claims have been rendered moot. With respect to any possible applicability of the prior art cited in the Official Action to the amended claims, applicants respectfully note that Miller et al. relates to a mineral-coating of paper and to coated papers. The coating contains a mineral pigment in a binder of ammonium or amine salt of a copolymer of an acrylic acid or methacrylic acid, acrylamide or methacrylamide and an alkyl acrylate or methacrylate. As is clear from the purpose of the coating and the description set forth in passages such as starting at column 2, line 33, the passage starting at column 4, line 38, and the Examples, the coating composition is prepared in an aqueous environment. Such an environment is entirely different from the presently claimed aspects of the invention which recite that the (meth)acrylic copolymer resin (A) is dissolved in an organic solvent (B). The use of an organic solvent is entirely different from the aqueous environment of Miller et al. and since the patent seeks to coat paper, it clearly would not be obvious to those of ordinary skill in the art to use an organic solvent in the coating composition. Thus, the claims now of record are clearly patentable over the teachings of Miller et al.

The '338 Japanese publication relates to a one-pack type resin which is said to enable low-temperature baking and which is said to be excellent in adhesion and chemical resistance and is further described as being useful as an anion electrodeposition coating material. The acrylic resin is a copolymer of (A) an acrylic or a methacrylic ester monomer, (B) and α,β-unsaturated carboxylic acid, (C) a hydroxyl group-containing unsaturated monomer, (D) a monomer derived from (meth)acrylamide and (E) other unsaturated monomers. The resin has a weight average molecular weight in the range of 5,000-100,000, and a defined acid value, hydroxyl value and glass transition temperature.

As recited in the claims of record, the resin (A) is prepared from defined amounts of (meth)acrylic acid, (meth)acrylic acid amide, and compound (S) having a reactive unsaturated bond other than the (meth)acrylic acid and (meth)acrylic acid amide. The specific recitation of a (meth)acrylic acid amide does not include a derivative thereof such as N-butoxy methylacrylamide disclosed in the '338 Japanese publication and relied on by the Examiner in the Official Action. The use of the N-butoxy methylacrylamide in combination with 2-hydroxyethyl acrylate acts as a crosslinking point which will lead to crosslinking by a dealcoholization reaction upon curing. As noted on pages 1 and 2 of the present application, the present inventions seeks to avoid the problems associated with crosslinking and seeks to provide a wear-resistance coating film obtained from the defined composition, particularly one exhibiting the define relationship of glass transition temperature Tg1, Tg2 and Tg3 recited in claim 1. Thus, the '338 Japanese publication does not anticipate any of the claims now of record and also does not render them obvious.

In view of the amendments to the claims and the foregoing discussion, applicants respectfully submit that the claims fully comply with the provisions of the

second paragraph of 35 U.S.C. §112 and are patentable over the cited prior art. Accordingly, reconsideration and allowance of the present application are respectfully requested.

Should the Examiner wish to discuss any aspect of the present application, the Examiner is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

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